

6/20/07- 01668

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**CH2MHILL**

June 20, 2007

USEPA Region 3  
Attn: Steven Hirsh  
1650 Arch Street  
Philadelphia, PA 19103-2029

Subject: Response to EPA Comments  
*Draft EE/CA for Upper Reaches of Bousch Creek; Naval Station Norfolk; Norfolk, Virginia, April 2007*

Dear Mr. Hirsh:

On behalf of the Navy, this response letter has been prepared regarding EPA's comments dated May 22, 2007, on the *Draft EE/CA for Upper Reaches of Bousch Creek, Naval Station Norfolk, Norfolk, Virginia*, CH2M HILL, April 2007. These comments were provided to Ms. Winoma Johnson (NAVFAC MIDLANT) via email on May 29, 2007. The following responses are provided for each comment.

1. It is unclear why concrete matting or pavers are necessary for the channel following removal of contaminated sediment in Alternative #3. This creek is a low gradient system that should not experience flows or storm surges sufficient to erode the stream bottom. Bousch Creek is likely depositional over most of its length. A much cheaper alternative would be to backfill with course sand which should provide sufficient stability, and is unlikely to be transported during tidal fluctuations. This material would also be easier to use as backfill and provide a good substrate for benthic invertebrates.

**Response:**

The Navy agrees with EPA's assessment of Alternative 3 and will therefore, not include channel protection in the preferred alternative.

2. The implementation of Alternatives #2 or #3 may result in the removal of significant areas of riparian vegetation (trees and shrubs along the bank). Where riparian buffers are disturbed or removed, these areas should be restored following completion of removal activities, including seeding with native riparian species, and planting native trees and shrubs. BTAG can provide a list of appropriate native riparian species.

**Response:**

The Navy agrees with BTAG's concern. Coordination with the Navy's Natural Resources Group will be conducted to assess impacts on riparian vegetation resulting from construction activities during remedy implementation. However, the

Navy would greatly appreciate any suggestions that you can provide on appropriate native riparian species that may be used in restoring the disturbed areas. The Navy's Natural Resources Group will utilize this information to make recommendations on how to restore the affected areas appropriately. These will be addressed in the site-specific removal action work plan to be completed prior to implementation.

3. Section 4.1.2 indicates that Alternative #2 will impact "nominal wetlands" and that these wetland impacts would be coordinated appropriately and minimized to the extent practicable. It is assumed that these impacts would also occur for alternative #3. The anticipated impacts should be described, as well as the anticipated mitigation actions.

**Response:**

The Navy agrees with this response. The third sentence of the first paragraph in Section 4.1.3 will be revised to be consistent with Section 4.1.2 and include coordination for wetland impacts, the railroad, and NSN flightline operations. Should it be determined that mitigation actions are necessary, they will be addressed in the site-specific removal action work plan to be completed prior to implementation. The revised sentence will read:

*This alternative would involve the same process for sediment excavation, coordination for wetland impacts, railroad coordination, and the NSN flightline as described in Section 4.1.2 for Alternative 2.*

4. The BTAG recommends the selection of Alternative #2. This alternative would address all areas of ecological risk while eliminating the costs associated with the channel lining proposed in Alternatives #3A or #3B is not necessary and would result in a reduction of available habitat.

**Response:**

As noted above, the inclusion of channel lining will be removed from the selected alternative. Therefore, it is agreed that Alternative 2 will be the selected Alternative.

Mr. Steven Hirsh  
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If you questions or comments concerning these responses, please contact Ms. Winoma Johnson at (757) 444-3418.

Sincerely,

CH2M HILL

A handwritten signature in black ink, appearing to read "Paul", with a long horizontal flourish extending to the right.

Paul Landin, P.E.  
Project Manager

cc: Ms. Winoma Johnson, P.E./NAVFAC MIDLANT  
Mr. Erick Salopek/VDEQ  
Ms. Holly Rosnick/CH2M HILL  
Mr. Ed Corack/CH2M HILL  
Ms. Brenda Perkins/NAVFAC Atlantic